



#### Blue Crab Traffic Light Update

Presented to: Marine Fisheries Commission

DEPARTMENT OF ENVIRONMENTAL QUALITY

Marine Fisheries

| Jason Rock | August 17, 2017



- Implemented in Amendment 2 (November 2013)
- The Traffic Light evaluates qualitative and quantitative indicators of the stock
- Indicators are evaluated using a set of base years
- Indicator values are assigned a green, yellow, or red "signal"



- Similar indicators combine to form characteristics
- Characteristics combine to form the Traffic Light
- Divided into three characteristics:
  - Adult Abundance
  - Recruit Abundance
  - Production
- Overfished if Production characteristic is 75 percent red or higher for three consecutive years

#### Adaptive Management Plan

- Adult Abundance and Production characteristics trigger management action
- Management Thresholds
  - 50 percent red or higher (moderate management) for three consecutive years
  - 75 percent red or higher (elevated management) for two of three consecutive years
- Recruit Abundance characteristic used to inform management if another characteristic triggers management action

# Adaptive Management Plan

- When triggered, management action must be taken
- Specifies suite of management options for each characteristic at each management threshold
- Management measures must remain in place for a minimum of three years



# Adaptive Management Plan

Why was the three year time frame chosen?

Marine Fisheries Commission selected three years to:

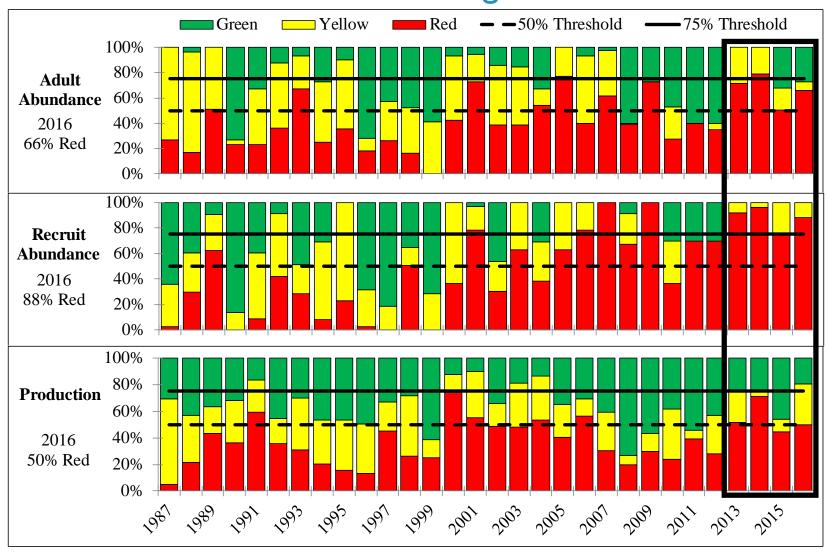
- Prevent action due to annual variability
- Prevent delaying needed action
- Take action based on short but continued negative trend

# Adaptive Management Plan

Moderate management measures in place for three years:

- If characteristic falls below management trigger then measures may be relaxed
- If characteristic unchanged or above elevated trigger then elevated measures will be enacted for three years
- After second three year period if characteristic has not improved then supplement process begins

# Blue Crab Traffic Light Results



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Stock is not considered overfished

 Adult abundance exceeded the moderate management threshold in 2016

 Per the adaptive management plan in Amendment 2, management measures enacted in 2016 should continue

# Blue Crab Traffic Light Results

Traffic Light Characteristic	Management Level	Management Action	Effective Date
Adult Abundance	Moderate	Add one cull ring to crab pots; must be within one mesh of corner of pot and one mesh of bottom of divider in the upper chamber of the pot	Jan. 15, 2017
Adult Abundance	Moderate	Eliminate harvest of v-apron immature female hard crabs (excluding peeler crabs) and include in cull tolerance	June 6, 2016
Adult Abundance	Moderate	Lower cull tolerance to 5 percent for all crabs, except mature females	June 6, 2016
Adult and Recruit Abundance	Elevated	Prohibit crab harvest with dredges except incidental to lawful oyster dredging	June 6, 2016
Recruit Abundance	Moderate	Prohibit harvest of dark sponge crabs (brown and black) during April; add dark sponge crabs to cull tolerance	June 6, 2016

#### Questions?



